

# EPA Emergency Response Situation Report

## Mercury Spill in Lead, SD

December 17, 2022

### Safety Message

Levels of mercury in the residence are hazardous. Levels of mercury in the Lead-Deadwood High School are elevated. Do not enter the residence nor designated school areas without appropriate personal protective equipment. EPA will be collecting real-time air quality data during school hours.

### [Images and Additional Information](#)

### Incident Overview

A Lead-Deadwood School District Nurse contacted City of Lead Volunteer Fire Department (VFD) regarding a student who had brought a bottle of mercury to the High School. The student had been playing with the mercury for three days and at least 16 kids could have been in contact with the material. Lead VFD requested assistance from Rapid City Fire HazMat who responded to the residence of the student that brought the mercury to school. HazMat reported that an unknown amount of elemental mercury from three bottles had spilled in a bedroom. HazMat identified multiple beads of mercury ranging in size from "pinhead to dime". The mercury came from the belongings of a relative who worked at a mine that were being stored in a home.

The State of South Dakota requested assistance from EPA on December 13, 2022. On December 15, EPA's Response Team discovered detectable levels of mercury at the High School. The Team also monitored mercury levels residence of the student's residence that were hazardous to human health. The family voluntarily agreed to leave their home. The Response Team helped secure alternate lodging for the family during a blizzard and moved them out of their home.

The Lead-Deadwood School District Nurse talked to the parents of the 16 kids and extended EPA's recommendation that they contact the On-Scene Coordinator and have their homes screened. Four additional homes are currently scheduled to be screened.

### Response Objectives

- Safety of the public and response personnel is top priority.
- Stabilize source areas to prevent the mercury from being spread.
- Minimize or, if possible, eliminate threats to human health posed by the mercury.
- Provide timely and accurate communication of response information to the public and affected stakeholders.

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### Operations Period December 17, 2022

#### Period Objectives

The objective of this Operations Period was to:

1. Begin decontamination efforts at the High School.
2. Continue planning response operations at the resident.
3. Expand scope to include screening of additional residences.

#### Period Accomplishments

EPA's Response Team is using a mercury vacuum to remove tiny but visible beads elemental mercury. Hard surfaces are being treated with a solution to chemically react with the mercury and create a non-hazardous product. Rooms are then heated and vented before additional screening is performed.

The family in the residence has granted EPA access to their home to perform a removal action. The home remains snowed in.

EPA's Response Team has scheduled screening visits to 3 additional homes on Dec 18 and one on Dec 19.

### Next Steps

EPA's Response Team will continue day-time operations at the school on Dec 18 (Sunday). Access to hazardous areas will be restricted by the start of school on Dec 19 (Monday) and HazMat crews will begin night-operations when school is closed. A Recon Team will be at the school collecting real-time data during school hours.

Response operations at the primary residence will begin Dec 19.